



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,532	07/24/2001	John A. Wheatley	54358USA5J.067	4765
32692	7590	07/13/2004	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY			SHAFFER, RICKY D	
PO BOX 33427			ART UNIT	
ST. PAUL, MN 55133-3427			PAPER NUMBER	
			2872	

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. Box 1450
ALEXANDRIA, VA 22313-1450
www.uspto.gov

MAILED
JUL 13 2004
GROUP 2800

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/911,532
Filing Date: July 24, 2001
Appellant(s): WHEATLEY ET AL

Stephen C. Jensen
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 27, 2004.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

Art Unit: 2872

(2) *Related Appeals and Interferences*

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

The rejection of claims 30 and 32-35 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

Art Unit: 2872

3,610,729	Rogers	10-1971
4,756,953	Utsumi	7-1988
4,799,772	Utsumi	1-1989

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 30, 30(32), 30(33), 30(34) and 30(35) are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers ('729) in view of Utsumi ('953) or Utsumi ('772).

Rogers discloses a multilayer interference film comprising alternating layers of at least first and second diverse polymeric materials [{(10),(12)} or {(30),(32)}], wherein the alternating layers includes a refractive index mismatch in at least one plane perpendicular to the film and layer thicknesses suitable to reflect light over a range of wavelengths, note figures 1 and 2 and the associated description thereof, except for explicitly stating that one of the first and second diverse polymeric material comprises polyethylene naphthalate.

Utsumi ('953) and Utsumi ('772) each teach it is known to use polyethylene naphthalate layers in place of polyethylene terephthalate layers in same field of endeavor for the purpose of improving the heat resistance, the heat shrinkage ratio, the mechanical properties and the degree of polarization.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to replace the polyethylene terephthalate layers of Rogers with polyethylene naphthalate layers, as taught by Utsumi ('953) or Utsumi ('772), in order to improve the heat resistance, the heat shrinkage ratio, the mechanical properties and the degree of polarization of the multilayer interference film. Note In re Leskin, 125 USPQ 416.

Art Unit: 2872

As to the limitations of claim 30(35), it is well known to use polymeric skin layers of a polycarbonate and/or polymethyl methacrylate materials in the same field of endeavor for the purpose of avoiding instabilities and/or to provide for mechanical strength.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the substrate of multilayer interference film of Rogers ('729) in view of Utsumi ('953) or Utsumi ('772) to include at least one polymeric skin layer of a polycarbonate and/or polymethyl methacrylate material (serving as applicant's third polymeric material different from the first and second diverse polymeric materials), as is commonly used and/or employed in the optical art in order to protect or improve the mechanical strength of the multilayer interference film.

This rejection was set forth in a prior Office Action, mailed on November 18, 2003.

(11) *Response to Argument*

In response to appellant's general argument that there is no suggestion or motivation to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion or motivation to do so found either in the references themselves or In The Knowledge Generally Available To One Of Ordinary Skill In The Art. See In re Fine, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596 (FED. CIR. 1988) and In re Jones, 958 F.2d 347, 21 U.S.P.Q. 2d 1941 (FED. CIR. 1992). In this case, the exemplary references to Utsumi ('953) and Utsumi ('772) each teach it is known to use polyethylene naphthalate layers in place of polyethylene terephthalate layers [i.e. see column 1, lines 33-34 of Utsumi ('983) and column 1, lines 45-46 of Utsumi ('772)] which would obviously convey to one of ordinary skill in the art

Art Unit: 2872

the general knowledge of selecting a known material (polyethylene naphthalate) on the basis of its suitability for the intended use as a polarizing film/layer having improved material properties [see column 1, lines 59-64 of Utsumi ('953) and column 4, lines 22-28 of Utsumi ('772)].

See In re Leshin, 125 USPQ 416.

Thus, it certainly would have been obvious to one of ordinary skill in the art at the time the invention was made to replace/substitute the individual layer(s) of polyethylene terephthalate material employed in the optical interference coating of Rogers ('729) with polyethylene naphthalate for the purpose of improving the weather resistance, the tear strength, the heat resistance, the heat shrinkage ratio, the mechanical properties and the degree of polarization of the multilayer interference film. Specifically, see column 8, lines 64-67 of Utsumi ('953) and column 4, lines 22-25 of Utsumi ('772) which each clearly states that a polyethylene naphthalate film "has a much higher heat resistance than a polyethylene terephthalate film" and "is superior in weather resistance, tear strength and heat resistance to a stretched polyethylene terephthalate film", see column 1, lines 59-64; column 7, lines 26-38; column 8, line 64 to column 9, line 3; and column 10, line 60 to column 11, line 4 of Utsumi ('953) and column 2, lines 4-9; column 3, lines 1-13; column 4, lines 22-28; and column 8, lines 13-21 of Utsumi ('772).

Furthermore, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference, nor is it that the claimed invention must be expressly suggested in anyone or all of the references, rather, the test is what the combined teaching of the references, as a whole, would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 208 U.S.P.Q. 871 (CCPA 1981).

Art Unit: 2872

Moreover, the appellant failed to provide any factual evidence to support appellant's conclusion that it would be "nonobvious" to one of ordinary skill in the art at the time the invention was made to replace/substitute the polyethylene terephthalate films of Rogers with polyethylene naphthalate film.

In response to appellant's general "obvious to try" argument, the examiner is not contending it would be obvious to try the proposed modification. The examiner's position is rather that the invention would have been obvious to do for the reasons stated above.

In response to appellant's general argument that the reference to Rogers does not teach a heat treatment of his films and that the Utsumi references do not teach polyethylene naphthalate (PEN) being subject to a coextrusion process amounts to arguing the references individually.

The examiner states one cannot show nonobviousness by attacking the references individually where, as here, the rejection is based on a combination of references. See In re Merck & Co., 800 F. 2d 1091, 231 U.S.P.Q. 375 (FED. CIR. 1986) and In re Keller, 642 F. 2d 413, 208 U.S.P.Q. 871 (CCPA 1981).

Furthermore, it would appear that the appellant's statement that Rogers does not teach a heat treatment of his films is unfounded due to the fact the Rogers clearly teaches that the multilayer coextrusion was stretched approximately 3 percent at 30 degrees Celsius which would appear to be a heat treatment of his films. See column 5, lines 63-65 of Rogers. Similarly, the polyethylene naphthalate (PEN) films of the Utsumi references would appear to be certainly capable of being subject to a coextrusion process due to the fact the films are extruded. See column 8, lines 23-29 of Utsumi ('953) and column 3, lines 49-54 of Utsumi ('772).

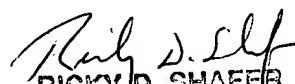
Art Unit: 2872

In response to appellant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning the examiner states that it must be recognized that any judgement on obviousness is in a sense necessary a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of one of ordinary skill in the art at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

The rejection of claims 32-35 stand or fall with claim 30 due to the fact that the appellant's brief does not include a statement that this grouping of claims do not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


RICKY D. SHAFER
PATENT EXAMINER
ART UNIT 2872

R.D. Shafer *RDS*
July 12, 2004

Conferees
D. Dunn *Dunn*
O. Chaudhuri *OC*
R.D. Shafer *RDS*